

# IED Defeat Gated Training Strategy

## A Holistic Approach to Preparing Units and Soldiers for Combat

By Colonel Kenneth J. Crawford

**W**arfighters and leaders across the United States Army often face the same challenge as they create and execute their directed mission-essential task list (DMETL) training. Once they receive orders for deployment, their interests quickly adjust to their future operating environment and the threats therein. The most common and lethal threat experienced on today's battlefield is the improvised explosive device (IED).

Of the 4,865 fallen warriors in Operation Iraqi Freedom and Operation Enduring Freedom,<sup>1</sup> 3,830<sup>2</sup> are a result of hostile action, and 2,350—or 61.4 percent—are the direct result of an IED.<sup>3</sup> Thousands more have been wounded by the devices. These deadly IEDs consist of various types and configurations of explosives, munitions, triggers, and arming and firing methods. However, there is one constant element—it took an enemy to design, finance, manufacture, transport, emplace, arm, and (sometimes) detonate an extremely lethal device against our fellow warriors. The purpose of this article is to furnish leaders and resource providers with a holistic and practical approach to prepare and train Soldiers and units for combat. Specifically, it is meant to provide a methodical approach along the three lines of operation laid out by the Joint IED Defeat Organization (JIEDDO),<sup>4</sup> which calls for—

- Defeating the device.
- Attacking the network.
- Training the force.



Photo by Sergeant First Class Kap Kim

IED defeat skills are important for Soldiers whether mounted or on foot.

| Report Documentation Page  |                                    |                                     |   | Form Approved<br>OMB No. 0704-0188                  |                                 |
|--|------------------------------------|-------------------------------------|---|---|---------------------------------|
| Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. |                                    |                                     |   |   |                                 |
| 1. REPORT DATE<br><b>APR 2009</b>  |                                    | 2. REPORT TYPE                      |   | 3. DATES COVERED<br><b>00-00-2009 to 00-00-2009</b> |                                 |
| 4. TITLE AND SUBTITLE<br><b>IED Defeat Gated Training Strategy: A Solistic Approach to Preparing Units and Soldiers for Combat</b>   |                                    |                                     |   | 5a. CONTRACT NUMBER                                 |                                 |
|  |                                    |                                     |   | 5b. GRANT NUMBER                                    |                                 |
|  |                                    |                                     |   | 5c. PROGRAM ELEMENT NUMBER                          |                                 |
| 6. AUTHOR(S)   |                                    |                                     |   | 5d. PROJECT NUMBER                                  |                                 |
|  |                                    |                                     |   | 5e. TASK NUMBER                                     |                                 |
|  |                                    |                                     |   | 5f. WORK UNIT NUMBER                                |                                 |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)<br><b>U.S. Army Engineer School,14010 MSCoE Loop BLDG 3201, Suite 2661,Fort Leonard Wood ,MO,65473-8702</b>   |                                    |                                     |   | 8. PERFORMING ORGANIZATION REPORT NUMBER            |                                 |
| 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)  |                                    |                                     |   | 10. SPONSOR/MONITOR'S ACRONYM(S)                    |                                 |
|  |                                    |                                     |   | 11. SPONSOR/MONITOR'S REPORT NUMBER(S)              |                                 |
| 12. DISTRIBUTION/AVAILABILITY STATEMENT<br><b>Approved for public release; distribution unlimited</b>  |                                    |                                     |   |   |                                 |
| 13. SUPPLEMENTARY NOTES  |                                    |                                     |   |   |                                 |
| 14. ABSTRACT   |                                    |                                     |   |   |                                 |
| 15. SUBJECT TERMS  |                                    |                                     |   |   |                                 |
| 16. SECURITY CLASSIFICATION OF:  |                                    |                                     | 17. LIMITATION OF ABSTRACT<br><b>Same as Report (SAR)</b> | 18. NUMBER OF PAGES<br><b>7</b>                     | 19a. NAME OF RESPONSIBLE PERSON |
| a. REPORT<br><b>unclassified</b>   | b. ABSTRACT<br><b>unclassified</b> | c. THIS PAGE<br><b>unclassified</b> |   |   |                                 |

## Spheres of IEDD Enablers and Connectivity

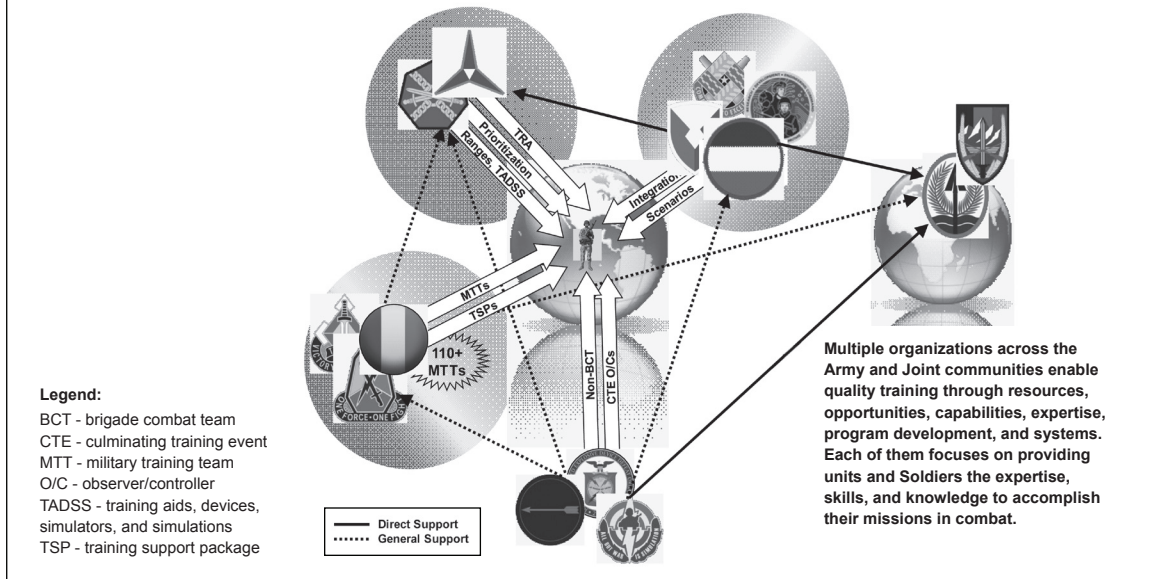


Figure 1

The readily available and supporting Joint Center of Excellence at Fort Irwin, California, supports training warfighters by “validating and propagating IED defeat (IEDD) tactics, using [tactics,] techniques and procedures (TTP) and lessons learned from theater.”<sup>25</sup> The primary outlet for this expertise is found in our combat training centers (CTCs), which provide units with a wealth of experience and resources in a hyper-realistic training environment. The challenge is providing this quality of training experience across the Army for all deploying forces at home and mobilization stations for all Regular Army and Reserve Component forces.

### Providing Quality Training

A systematic approach to providing Soldiers and units with the quality of training they deserve is to harness the resources of our installations—facilities; ranges; training aids, devices, simulators, and simulations [TADSS]—and the expertise of specific organizations such as JIED-DO, the Asymmetric Warfare Group (AWG), the United States Army Training and Doctrine Command’s IEDD Integrated Capabilities Development Team, and Forces Command’s IEDD Integration Cells. These are used in a gated training strategy (GTS) similar to the one used to conduct Bradley Fighting Vehicle and tank gunnery tables. (See Figure 1 for the interrelated resource providers for home station training.) The solution isn’t simple and will require vigilance to maintain relevance as our tactical environments and enemy TTP change. Every unit leader’s intent is to develop and resource the training that will best prepare their Soldiers for what they may experience downrange. Rather than complicating resource requirements, the IEDD community must enable the chain of command, which has the ultimate responsibility (inherent within senior commanders’ training and readiness

authority [TRA]) for preparing Soldiers and units for deployment. The cascading complexity of efficiently coordinating the resources for a senior commander requires a dedicated and focused effort to provide support to all units training at home station. Essentially, this is commanders’ business and commanders must have the ability to use resources to meet their common challenge, which is the absence of a standard, relevant, and current approach to training IEDD at the individual through collective levels.

### Structuring and Planning the GTS

Structuring a way to overcome this challenge through live, virtual, and constructive (LVC) training to produce a CTC-like experience at home station lets leaders and units hone their skills, battle drills, and TTP before certification and deployment. In essence, the leaders and units will arrive at the CTC or their deployed destination with heightened levels of competency and ability. The GTS is not a catchall approach for training on all predeployment tasks, but focuses on IEDD and its supporting or interrelated tactical tasks. Given the high probability that IEDs will remain a weapon of choice for our enemies in future conflicts, our IEDD training must be adaptive, structured, and holistic.

Soldiers are at risk of encountering IEDs while deployed, and their probability of encountering them depends on their unique operational environment. To effectively synchronize our IEDD GTS, we must prioritize the competing demands for resources and dovetail the hierarchy of training requirements with the training tasks in the four categories articulated in FORSCOM’s Southwest Asia (SWA) Training Guidance<sup>6</sup> in November 2008—(see Figure 2, page 33). The GTS focuses the specific individual, leader, and collective IEDD training tasks (outlined in red boxes in Figure 2), builds upon each training experience,

## Required Tasks by Deployment Category

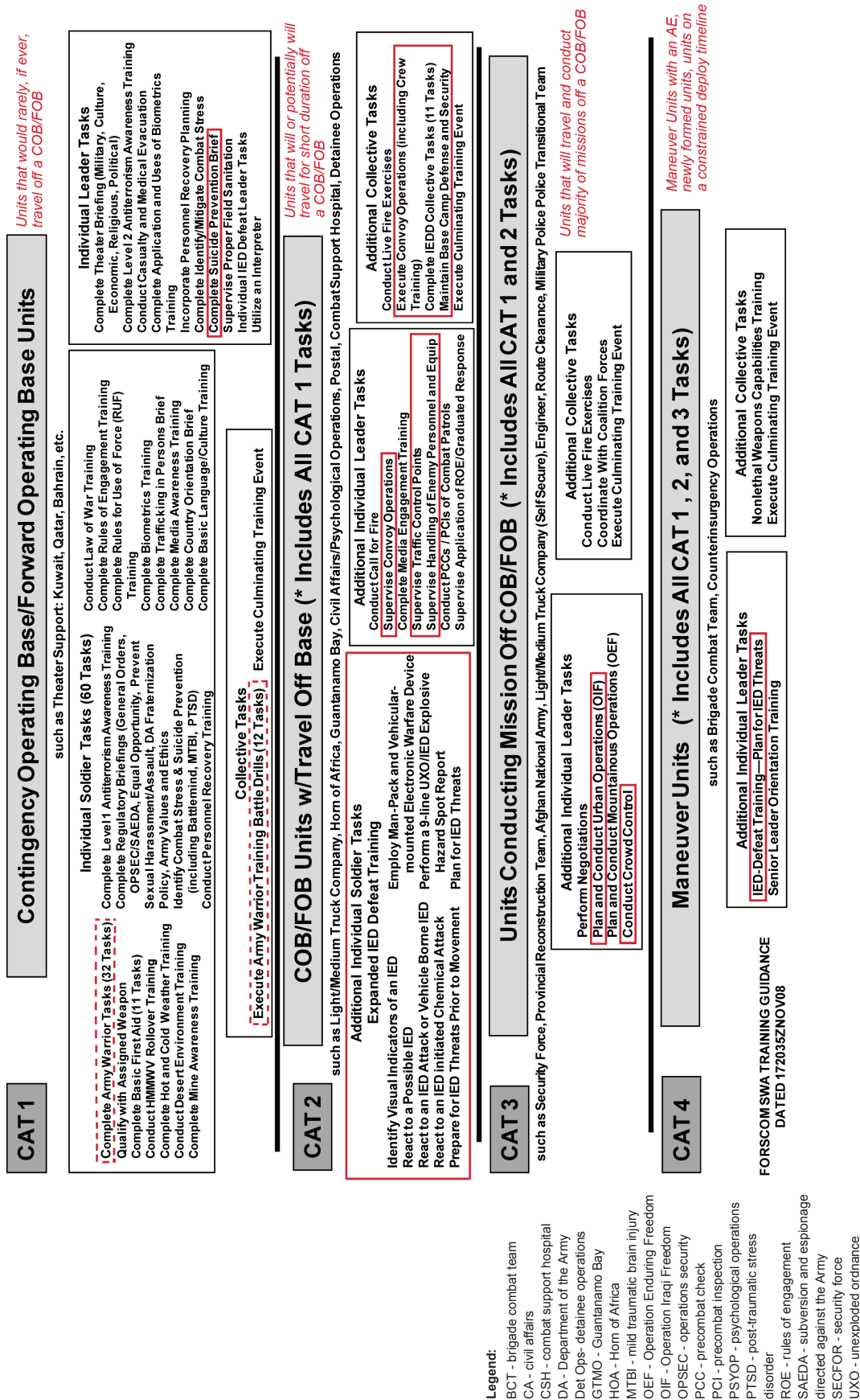


Figure 2

and culminates in the unit's ability to systematically defeat the device and attack the network.

The construct of the IEDD GTS takes into account the following considerations:

- It must be scalable to meet the desired training objectives from platoon to brigade level. The strategy must have the ability to be tailored to a unit's mission and experience level. Commanders must tailor the concept to fit current unit training levels, especially for a combat-experienced force; the start point for training may not always be the "crawl" stage. As units head into the next higher level's training event, they must prepare accordingly. As units prepare for major combat operations gunnery, a crew is expected to execute specific tasks before operating as part of a section or platoon; platoons must master specific tasks before executing company-level operations; and companies and battalions must be able to effectively maneuver and mass firepower to support battalion- and brigade-level operations. The nesting of IEDD GTS is similar with the underlying objectives of defeating the device and maneuvering on and attacking the network.
- The training, enemy and friendly TTP, available TADSS, terrain and environment, and systems employed must be relevant and current. We should train with the same systems and platforms Soldiers will operate downrange to reduce the initial risks associated with learning while being engaged. It is absolutely necessary to field our platforms and systems first to those in the fight. To train effectively on similar systems, we can create surrogates and mock-ups to achieve the desired effects until we field the actual systems at our home stations.

- We must ensure that our doctrine and knowledge management remain relevant, current, dynamic, and adaptive to the changing threat abroad. JIEDDO provides outstanding references and resources for LVC training applications through the Knowledge and Information Fusion Exchange (KnIFE). The primary purpose of KnIFE is "to exchange information, consolidate best practices, and respond to requests for information (RFIs) related to the asymmetric application of ... (TTP) by both enemy and friendly forces."<sup>7</sup> The KnIFE website provides leaders and units with a wealth of information to enable quality training. Keeping our doctrine current is a significant challenge. Our existing doctrine is a reference that we must expand into our digital knowledge management databases to allow the Army to remain current until the release of the next printed revision. The constantly changing conditions and operating environments mandate a requirement to have both a baseline printed reference and an individual, dynamic online database of information to maintain relevance for the warfighter's training.

We must provide and resource the most realistic training for our Soldiers to immerse them in the environment they'll operate in abroad. The structures, civilians, smells, and sounds experienced by individual Soldiers and units serve to help "inoculate" and prepare them to instinctively respond to conditions they might encounter while deployed.

### IEDD "Gunnery"

The IEDD GTS is a holistic approach to training everything from individual Soldiers to brigade-size units to defeat the device and attack the network. The overarching intent is to ensure that units understand and can effectively analyze the complexity of the IEDD fight. The IEDD

GTS provides this by creating gates where individuals and units must successfully accomplish specific training objectives to standard before moving to the next higher and more complex gate. The structure of the IEDD GTS includes tables similar to Bradley Fighting Vehicle and tank gunnery tables and is focused on specific unit levels (see Figure 3, page 35).

*Gate 1* establishes a baseline to ensure that every individual, crew, and squad can successfully execute the common individual and leader training tasks. It also guarantees that they possess a common frame of reference based on FORSCOM training guidance, doctrine, unit standing operating procedures (SOPs), and current enemy and friendly TTP. KnIFE's training



Photo by Sergeant First Class Kap Kim

The environments where IEDs are encountered range from rural to inner-city slums. Knowing local residents is just as important as knowing TTP and Army systems.

## IEDD Gated Training Strategy Concept (Live-Virtual-Constructive)

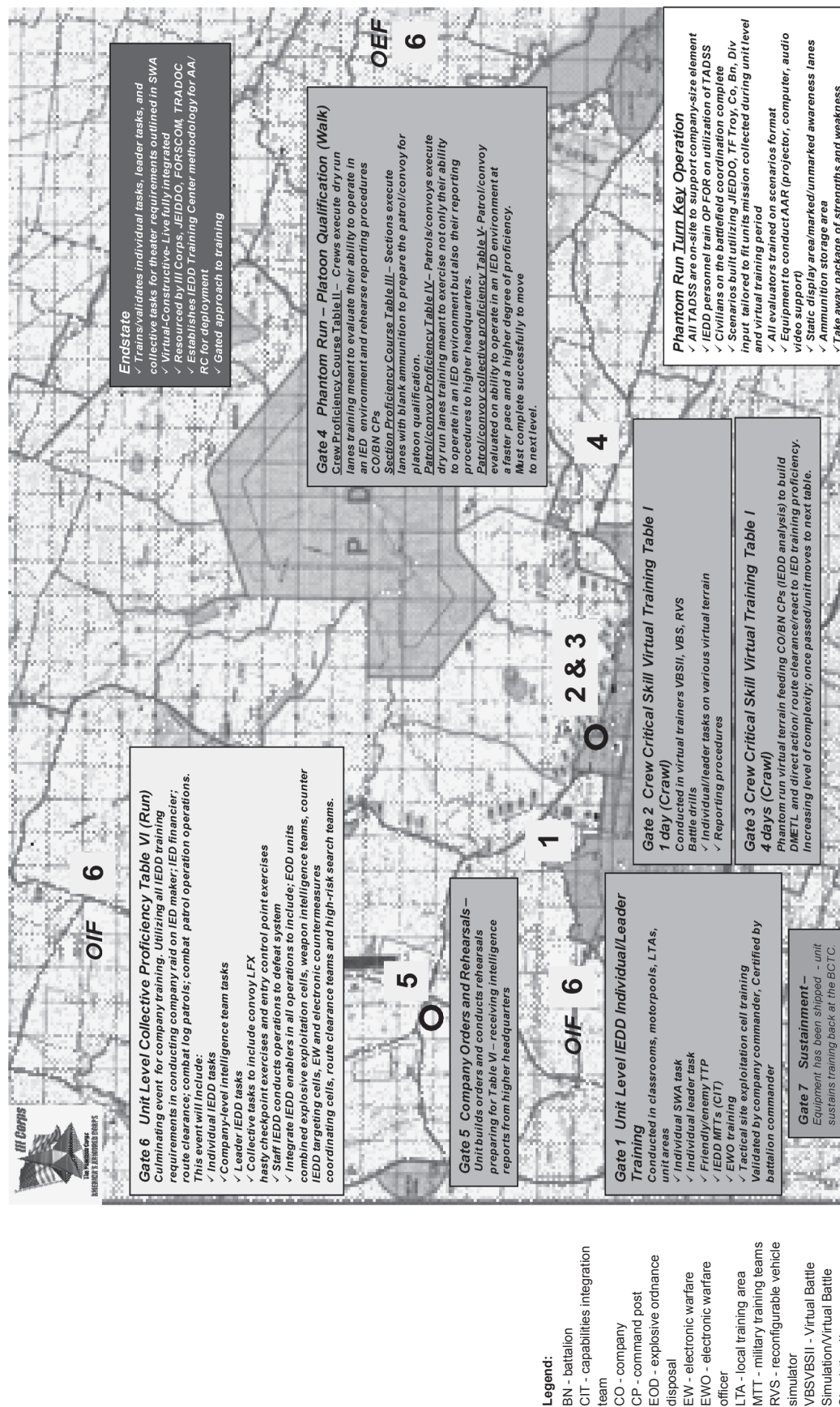


Figure 3



Photo by Colonel Kenneth J. Crawford

**As the sun sets over Baghdad, a Buffalo crewmember prepares for a night mission.**

resources can enhance unit capabilities when Soldiers attend courses, participate in distance learning, or apply the training support packages available for download. Similar to the gunnery skills tests, commanders certify that individuals and crews are ready to begin the LVC training tables outlined in the IEDD GTS before allowing crews to move into Table I (Crew Skills Virtual Training).

---



---

***“We must provide and resource the most realistic training for our Soldiers to immerse them in the environment they’ll operate in abroad ... and prepare them to instinctively respond to conditions they might encounter while deployed.”***

---



---

**Table I**

Table I includes *Gate 2* and *Gate 3*, which build on previously gained experiences and knowledge. Unit training is applied and refined through virtual training with simulators and simulations to validate the TTP units will adopt in their SOPs for tactical operations. The focus of Table I is to ensure that crews can effectively perform individual and leader tasks in virtual terrain, provide proper contact reports, and successfully execute crew battle drills, such as rollover drills using the high-mobility, multipurpose wheeled vehicle (HMMWV) egress assistance trainer (HEAT). *Gate 2* is executed in generic virtual terrain and includes graduated skill levels. Once crews successfully meet the standards of performance, they pass into the second half of Table I (*Gate 3*), which provides a more complex and realistic training experience for the crew

and unit. The simulated terrain replicates actual terrain they will encounter in Tables II to V. At this point, the scenario provides a comprehensive experience from the individual crew up to the battalion and brigade commander and staff levels. This takes advantage of the way units manage, report, synthesize, and analyze reports and information for future decisions and action. Every report from Table I to VI (collective proficiency) is meaningful, eventually leading to the ultimate objective of successfully “attacking the network” and ensuring a holistic training experience.

#### **Tables II to V**

Platoons normally serve as the lowest level called on to execute patrols in a combat environment. Thus, Tables II to V build to platoon-level proficiency in live scenarios with a crawl-walk-run approach. Crews, sections, and platoons execute their mission and focus on their ability to operate in a combat environment, defeat the effects of IEDs, and submit effective reports as staffs analyze the reports and build actionable intelligence for direct action. Platoon leaders execute one or more missions, similar to what they could experience while deployed. Missions might include—

- Mounted or dismounted navigation.
- Tactical questioning.
- Reaction to contact.
- Establishment of traffic control points.
- Crowd control.
- Detainee operations.
- Other tasks, depending on training objectives selected from FORSCOM training guidance.

The crews, sections, and platoons encounter a hyperrealistic environment while responding to civilian role-players, enemy elements, urban structures, and other battlefield effects that replicate indirect and direct fire, IEDs, and homemade explosives. Once platoons meet the training standards of Table V (*Gate 4*) and the battalion or brigade establishes the IED network hierarchy and probable locations, the company gets orders to prepare to execute lethal operations. Since operations may be led by U.S., combined, or host nation forces, additional complexities and considerations may be included, based on the theater of operations, the established rules of engagement, or the status of forces agreement.

**Table VI**

Table VI (*Gate 5* and *Gate 6*) focuses on company-level planning, rehearsals, operations, and mission execution. Once all the platoons of a company successfully pass through *Gate 4*, the company receives its mission and begins troop-leading procedures on their forward operating base. On order, the company executes a direct-action mission to destroy or defeat the network by a raid, a cordon-and-search operation, or destruction. Depending on the available training terrain, Table VI could culminate in a combined arms live-fire exercise (LFX) on a multipurpose range complex where battalion and brigades can integrate combat multiplier resources, such as tactical unmanned aerial vehicles (TUAVs), precision fires, or attack aviation.

As units approach their deployment date and ship their equipment, the availability and application of simulations helps them sustain their skill sets and capabilities. *Gate 7* focuses on sustaining these skills and enables the training of Soldiers who arrive after a unit has finished its CTC rotation and shipped its equipment (normally 60 days before the unit's scheduled latest arrival date). These same Soldiers reap the benefits of the unit's training and quickly learn "what right looks like" as they study their unit's TTP and SOPs before deployment.

Figure 3 lays out the IEDD GTS as it is being developed at Fort Hood, Texas. The intent is for all units to have access to world-class home-station IEDD training facilities that enable them to successfully accomplish the desired DMETL tasks and deploy with validated TTP and SOPs. Due to shortened dwell times and the fact that not every type of unit can deploy to a CTC, these resources and training strategy enable units to attain readiness more quickly at their home stations. Additionally, this training can be integrated as part of a battalion or brigade combat team's gunnery scheme of maneuver with minimal effort and resource overhead. The commonality of training tasks and threat allows the Army to adopt the IEDD GTS concept and apply it across every installation for Regular Army and Reserve Component training.

### The Desired Effect

**T**he IEDD GTS allows units to build on realistic training scenarios to "defeat the device" as they execute missions and provide reports to battalion and brigade

tactical operation centers in virtual and live environments. Staffs synthesize the information gained from the reports into actionable intelligence and build target decks, as well as develop and direct missions, and commanders decide how and when to "attack the network" as they will during deployment. The outcome—or desired training effect—is a unit that is fully trained to operate, adapt, and decisively act in an extremely lethal environment with positive results. Units will deploy well-trained, able to defeat the device, and able to successfully attack the network.



*Colonel Crawford is the Assistant Chief of Staff G5 (Plans, Exercises, and Training) at III Corps, Fort Hood, Texas. Earlier assignments include combat tours during Operations Desert Shield and Desert Storm, Operation Continue Hope in Somalia, and two deployments during Operation Iraqi Freedom. He is a selectee for the Senior Service College as a Fellow at the University of Texas Institute of Advanced Technology. He holds a master's in engineering management from the University of Missouri–Rolla (now Missouri University of Science and Technology).*

### Endnotes

<sup>1</sup> Madonna Lebling, Magda Jean-Louis and Rena Kirsch, "Faces of the Fallen," *Washington Post*, <<http://projects.washingtonpost.com/fallen/about/>>, accessed on 21 February 2009.

<sup>2</sup> "Global War on Terrorism, Casualties by Military Service Component—Active, Guard and Reserve," October 7, 2001 through February 14, 2009, Defense Manpower Data Center—Data, Analysis and Programs Division, <[http://siadapp.dmdc.osd.mil/personnel/CASUALTY/gwot\\_component.pdf](http://siadapp.dmdc.osd.mil/personnel/CASUALTY/gwot_component.pdf)>, accessed on 21 February 2009.

<sup>3</sup> "Global War on Terrorism, by Reason," October 7, 2001 through January 31, 2009, Defense Manpower Data Center—Data, Analysis and Programs Division, <[http://siadapp.dmdc.osd.mil/personnel/CASUALTY/gwot\\_reason.pdf](http://siadapp.dmdc.osd.mil/personnel/CASUALTY/gwot_reason.pdf)>, accessed on 21 February 2009.

<sup>4</sup> Joint Improvised Explosive Device Defeat Organization (JIEDDO), "Train the Force," <<https://www.jieddo.dod.mil/CIEDTRAINING/CIEDTRAINHOME.ASPX>>, accessed 21 February 2009.

<sup>5</sup> JIEDDO, "Joint Center of Excellence (JCOE)," <<https://www.jieddo.dod.mil/CIEDTRAINING/CIEDTRAINHOME.ASPX>>, accessed 21 February 2009.

<sup>6</sup> FORSCOM Training Guidance for Follow-on Forces Deploying ISO Southwest Asia (SWA), updated 11 February 2009.

<sup>7</sup> Knowledge and Information Fusion Exchange mission statement, "The KnIFE Mission," <<https://knife.jfcom.mil/Pages/KnIFEPublic.aspx>>, accessed on 22 February 2009.